

Investment Benefits of an Ergonomics Program

Ergonomics is the science of optimizing the job to the worker. Where there is a mismatch between the worker, work, and workstation, injuries often occur. OSHA indicates that musculoskeletal disorders account for one-third of the 1.7 million occupational injuries and illnesses in the U.S. every year and represents its largest work-related injury and illness issue. The Bureau of Labor Statistics reports that in 1999 over 582,000 musculoskeletal disorders were reported in the United States, accounting for one of every three lost work time cases.

The average cost per claim for upper extremity and lower back musculoskeletal disorders is approximately twice that of the average workers' compensation claim (\$8,075 for upper extremity musculoskeletal disorder and \$8,320 for lower back musculoskeletal disorder, compared with \$4,075 for the average non-musculoskeletal disorder workers' compensation claim). Including workers' compensation costs and factors such as restricted duty time, reduced worker productivity, and diminished work product and quality, OSHA estimates that musculoskeletal disorders annually cost the U.S. workforce \$54 billion. *OSHA/DOL, Proposed Ergonomic Standard Overview. 2000.*

The National Academy of Science estimates that each year there are over 70 million physician visits for musculoskeletal disorders, including treatment for carpal tunnel syndrome, low back pain, and tendonitis. *National Research Council. Panel on Musculoskeletal Disorders in the Workplace, Commission on Behavioral and Social Sciences and Education, National Research Council and Institute of Medicine. Musculoskeletal Disorders and The Workplace. 2001.*

For 1999, the Department of Labor reported that, each incidence of carpal tunnel syndrome resulted in an average of 27 days away from work and repetitive motion type injuries resulted in an average of 17 days off from work. Women account for 70 percent of work-related carpal tunnel syndrome and 62 percent of tendonitis injuries. The Labor Department also reported that, each year, more than 100,000 working women experience low back pain causing them to be absent from the workplace. *OSHA National New Release: USDL 99-333. November 22, 1999.*

Benefits of a Workplace Ergonomics Program

The National Academy of Science, having conducted numerous studies on musculoskeletal disorders, concluded "...that specific (ergonomic) interventions can reduce the reported rate of musculoskeletal disorders for workers who perform high-risk tasks". *Work-Related Musculoskeletal Disorders: The Research Base, ISBN 0-309-06327. 1998.*

The National Institute for Occupational Safety and Health, following their review of hundreds of scientific studies, confirms this finding as well. *OSHA/DOL, Proposed Ergonomic Standard Overview. 2000.*

Several studies clearly indicate that ergonomic program effectiveness rates of more than 65% are attainable by eliminating or substantially reducing workplace risk factors. They also strongly suggest that these programs may reduce particularly prevalent and severe kinds of musculoskeletal disorders, such as cases of tendonitis, back injury, and carpal tunnel syndrome, by a minimum of 50% and often more. *DHHS-NIOSH Publication No. 97-117.*

A 1997 General Accounting Office study identified the benefits of successful ergonomics programs that included a reduction in the number and severity of work-related injuries and illnesses, fewer lost workdays, a reduction in workers' compensation costs, and improved worker morale, productivity and product quality. GAO/HEHS-97-163 *Worker Protection: Private Sector Ergonomics Programs Yield Positive Results*. August 1997.

The estimated cost savings associated with averting a single musculoskeletal disorder-related workers' compensation claim is \$22,546. This total includes the value of lost production, medical costs, insurance administrative costs, and indirect costs to employers. Klein, R.W.; Nordman, E.C.; and Fritz, J.L. *Market Conditions in Workers' Compensation Insurance*. Interim Report presented to the National Association of Insurance Carriers Workers' Compensation Task Force. July 9, 1993 (Ex. 26-1586).

Employers reporting positive returns on their ergonomics program investments include:

- The Blue Cross/Blue Shield Rhode Island Ergonomics Program reported that it decreased its organization's lost workdays from 345 in 1999 to 104 in 2000 (70% decrease) and lowered its workers' compensation costs 89% from \$227, 620 to \$26,010. *CTD (Cumulative Trauma Disorders) News*, May 2001.
- Between 1992 and 1996, the New York Times reported that it reduced its workers' compensation claims by 84%, reduced lost work time by 75% and decreased lost workdays by 91%, as a result of its ergonomics program. Michael Gauf, *Ergonomics That Work*. 1998.
- Intracorp reported that a public service company with 330 employees realized a return of \$7.35 for every \$1.00 invested in its ergonomics program. *CTD News*, December 1999.
- Northwest Aerospace Company realized a 10-15 percent increase in productivity (a benefit of greater than \$200,000) following implementation of an ergonomics program. *Washington State Dept. of Labor and Industries, Fitting The Job to The Worker*, 1994.
- Jerome Foods Inc. reported saving \$3 for every \$1 invested in an ergonomics program. *Washington State Dept. of Labor and Industries, Fitting The Job to The Worker*, 1994.

For over half a century, FOH has delivered high quality occupational health services to Federal managers. FOH's knowledge of the Federal workplace, combined with strategic partnerships with professional health, environmental and safety organizations, enables FOH to help other Federal organizations maintain a safe and healthy workplace. FOH has created a team of professionals that is unparalleled in its ability to work within the Federal structure, yet remains as flexible and innovative as any private sector provider.

Through convenient interagency agreements, FOH's Clinical Services, Wellness/Fitness Programs, Environmental Health Services, and Employee Assistance and Work/Life Programs can provide your agency with a comprehensive occupational health program that saves you time and money. Our ability to customize services enables you to integrate components of our services with existing programs, enhancing their impact and ensuring that your agency meets its obligation to provide a safe and healthy workplace.

Make Federal Occupational Health your partner in building a healthier, more productive work force. For more information, please visit us at www.foh.dhhs.gov or call us today at **1-800-457-9808**.

Because you need a healthy work force. And we can help you build one.

healthy bodies ❖ *sound minds* ❖ *a safe place to work*